

Application No: 10/083,085


Art Unit: 3681

Second amendment to the Claims:

Claim # 1: (currently amended);

Claims 2 to 5: (cancelled).

Claim # 1 A hydro mechanical automatic transmission for automobiles ~~and motorcycles~~  
having ~~a source of moving force~~ having an engine and driving wheels comprising:

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- a) an input shaft, connected in a permanent way to an engine, for transmitting a torque exclusively to a solar gear, of a single planetary gear set, where multi disc clutches are no longer used,
  - b) a ~~permanent connected complementary hydraulic means, a hydraulic device also connected in a permanent way to said input shaft and to a mechanical device, a~~ hydraulic torque converter comprising: one pump, a single turbine and a reactor mounted on a free wheel, in which said turbine's shaft is exclusively connected to a satellite's carrier, of a planetary gear set, being said satellite's carrier a single and exclusive connection for hydraulically transmitting a torque from said engine ~~source of moving force~~ to said driving wheels, where multi disc clutches are not needed,
  - c) a ~~permanent connected complementary mechanical power converter device, in which multi disc clutches are not included as connecting mean,~~ connected in a permanent way to said engine's output shaft, for mechanically converting and transmitting a torque, from said engine ~~source of moving force~~ to the driving wheels which also comprises:
    - an essential free wheel, connected by one end to a ring gear of said single planetary gear set and, by the other end, to a brake, for permitting such ring gear, to be moved in only one direction at the time when the gear ratio of said planetary gear set, becomes lower than that given by the proportional sizes of the gears of such planetary set,
  - d) a hydraulic driving device,

e) ~~an optional shifting device as driving selector mean;~~

f) a brake, for stopping the turbine shaft of said hydraulic torque converter, only for shifting purposes, at the time when a second brake, applied to said mechanical device is released,

C2 g) ~~a linking device for keeping a permanent connection between said mechanical device and said hydraulic device.~~

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